



ÖSTRAND PULP MILL, TIMRÅ, SWEDEN

CASE STUDY

## Alimak elevator at world's largest production line for bleached softwood kraft pulp

Access anytime, anywhere

**ALIMAK**

## Alimak elevator at world's largest production line for bleached softwood kraft pulp

Process industries have to run continuously without interruption. Alimak elevators provide quick and easy access for inspection and preventive maintenance, ensuring that machinery performs accurately and smoothly and turning downtime into uptime.

### ELEVATOR AND FRAME

Alimak has been associated with the pulp and paper industry since 1966, when the first Alimak rack and pinion industrial elevator was installed on a digester in Sweden. Numerous industrial plants around the world have chosen to use our elevator systems to monitor and service their processes since then.

### INVESTING IN THE FUTURE

SCA is a Swedish timber, pulp and paper manufacturer with headquarters in Sundsvall and approximately 4,000 employees. Its main products include publication papers, solid-wood products, pulp and forest-based biofuel. SCA is Europe's largest private owner of forest land, with 2.6 million hectares, the size of Macedonia.

The company has recently invested SEK 7.8 billion in Östrand pulp mill in Timrå, Sweden under project name "Helios". The new factory, which started up in June 2018, will be a world-class in terms of product quality, environment and competitiveness. It is one of the largest industrial investments ever in Sweden.

SCA pulp mill produces bleached kraft pulp and CTMP and doubled its production capacity from 430,000 tonnes to 900,000 tonnes through the investment.

Kraft pulp is produced by boiling chips into pulp that

is then bleached using hydrogen peroxide and oxygen to produce cellulose fibre that is as pure as possible. Crude turpentine is also extracted from the wood.

Valmet and Andritz were tasked with delivering large parts of the process equipment in the Helios projects and to carrying out all process engineering and mechanical engineering work, manufacturing and installation.

### A NEW ALIMAK ELEVATOR

The old Östrand mill had an Alimak industrial rack-and-pinion elevator installed and running since 1986.

For the new factory, Valmet decided to go for an ALIMAK SE 700 to facilitate easy access for service and inspection of the boiler. The rack-and-pinion elevator is installed on the outside of the structure and used approximately 25 times per day. The elevator car and landings are made of stainless steel, ensuring long service life in even the toughest environments.

The decision to invest again in an Alimak elevator was based on the brand's reputation for safety and reliability in rough environments – which the site easily can be described as.





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## MADE FOR INDUSTRIAL USE

Alimak industrial elevators are available with extruded aluminium or stainless steel cars, ensuring long service life in even the toughest environments. The drive unit is located on top of the car, which climbs on a self-supporting mast, requiring no supporting elevator shaft or separate machine room. The mast is made of galvanised steel. The erection of the elevator mast takes place from the car itself. If installed early in the construction process, the elevator can often be used in the actual construction of the building on which it will then remain as a permanent elevator.

The design and modular construction of Alimak SE elevators enable specific user requirements to be met from fully standardised components. Capacities range from 300 kg to 7,000 kg. Alimak SE elevators are available in single- or twin-mast configurations and with travel speeds up to 1.0 m/s. The largest Alimak elevator built and delivered so far is a 24,000-kg capacity unit guided on four mast towers. Lifting heights well in excess of 250 metres are possible with Alimak rack and pinion elevators.

### ELEVATOR DETAILS

Location:	Östrand pulp mill, Timrå, Sweden
Applications:	Boiler
Elevator type:	Rack and pinion
Elevator model:	ALIMAK SE 700 FC
Capacity:	700 kg
Elevator car size:	1.04 m x 1.43 m x 2.17 m (WxLxH)
Lifting height:	60 m
No. of landings:	5



*The Alimak rack-and-pinion elevator is used approximately 25 times per day for service and inspection of the pulp mills boiler.*